THREE CASES OF SUPPURATING OVARIAN TUMOR TREATED BY DRAINAGE.[1]

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THESE cases seem naturally to divide themselves from other abdominal operations, I therefore report them separately.

CASE I.— CYST DISCHARGING INTO RECTUM: DRAINAGE PER RECTUM. CURED.

Miss C. was a servant, twenty-seven years old. I first saw her on October 27th, 1882. She was thin and in miserable health. She complained especially of bearing-down pains and of a constant discharge of pus from the rectum. Five years previous she had experienced great relief from a sudden discharge of pus from the rectum. From that time she had very little trouble until two years before I saw her, when the discharge began again. She suffered from constant pain in the lower abdomen and had frequent attacks of vomiting. She was very constipated and every movement caused severe pain.

On examination I found a tumor the size of a large orange in the right side of the pelvis, the uterus being pushed to the left. The uterus and tumor were evidently bound together by adhesions, but the whole mass was movable in the pelvis. I considered the case one of suppurating cyst or fallopian tube discharging into the rectum, and advised her to enter the Free Hospital for Women, which she did.

November 23d. Under ether I succeeded in finding

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the opening into the cyst, which was very high up in the rectum. I was able to bring this opening into view by putting a Sims's speculum into the rectum (patient in Sims's position) and pulling down the anterior wall with double hooks and tenaculum. This opening being dilated and enlarged, several ounces of pus were evacuated. A drainage-tube was put in and the cyst washed out. This operation caused only slight constitutional disturbance. The cavity was washed out regularly; the discharge diminished to a certain extent and the tumor became smaller, but the soft rubber drainage-tube gave us trouble by getting bent and clogged, and finally it was removed in about ten days because it caused severe pain of the anus. After waiting some weeks to see if the cavity was disposed to close, it became evident that the tumor still contained pus and required further attention.

January 18th. Ether was again given. The opening being dilated as before, numerous partitions inside the cavity were broken down with the finger. In this way the contents was thoroughly evacuated. Drs. Baker and Davenport were present and kindly assisted me. I then placed a hard-rubber tube, curved like a male catheter, which I had had made especially for this case, to obviate the difficulties caused by the soft rubber tube after the previous operation. The temperature rose to 104.2° F., but soon subsided. The cyst cavity could be thoroughly washed out with a catheter passed up inside the hard-rubber drainage-tube.

January 27th. The patient was doing well; the wash water returned clear, but there was severe pain.

January 30th. The abdomen was swollen and tender, the patient had a bad, hollow-eyed look, the temperature was raised and the pulse rapid. There was evidently a beginning peritonitis. The drainage-tube was removed and a poultice applied to the abdomen.

February 3d. The above symptoms were disappearing.

February 7th. Patient much better, eating well. From this time on there was a steady improvement, and on February 16th, she was up and about the ward.

March 4th. There was no discharge from the rectum. Patient in good condition.

March 8th. Patient discharged from the hospital cured.

I saw her again about a year later. She had gained forty pounds since the operation. The cyst, had entirely disappeared. The uterus was bound tightly to the sacrum from the contraction of the old cyst cavity. I afterwards freed the uterus from the sacrum, and when last seen in 1885, she was perfectly well.

CASE II.— CYST AND PERITONEUM INFLAMED, DRAINAGE THROUGH ABDOMINAL WALL: COUNTER OPENING IN VAGINA. CURED.

Miss D., nineteen years old, was sent to me by Dr. W. A. Dunn and was first seen at my office March 23d, 1885. Six months previous she had had difficulty in micturition: three months later she noticed swelling and pain in the lower abdomen. This had gradually increased. She had been seen by Dr. F. B. Harrington, who informs me that he found her with a temperature of 103° F., and put her to bed. After a month's rest in bed she was able to return to her work. But the pain and swelling soon became much worse. The menstruation had been natural until the last three months, during which time it had been very profuse, so much so that she had been much pulled down from the loss of blood. She was thin and very pale, and in wretched condition.

The outline of a fluctuating tumor was indistinctly

felt just below the umbilicus. It had the indistinct feeling that an ovarian tumor might have if a blanket were placed between the tumor and the abdominal wall. The tumor was dull on percussion, while the flanks were tympanitic. The uterus was clearly felt in antiflexion, separate from the tumor but not freely movable.

The diagnosis was ovarian cyst, and she was advised to enter the Free Hospital. The operation was done on April 7th, 1885. On opening the abdomen I found the peritoneum from one fourth to one-half an inch thick, very red and vascular, and studded with small gray granules. This peritoneum did not look in the least like anything I had ever seen, it was so red and vascular that it resembled liver or kidney tissue. When I opened it, it seemed as if I must have cut some strange organ. It bled profusely at every nick. In fact I should not have been in the least surprised had this patient died within six months of cancer of the peritoneum or tuberculosis. The cyst was finally reached and found to be very firmly adherent in every direction. Its removal was simply impossible. In contained two quarts or more of pus. The cyst was washed and sponged out and its walls stitched to the abdominal wall. A large opening was left through which two large drainage tubes were inserted. Dr. Whitney examined the fluid and reported that it was pus, but was probably from a cyst cavity.

There was very little disturbance from the operation. The temperature was never above 100° F. The cyst discharged freely and was washed out twice a day with carbolic 1-80. The patient was up and about in two weeks. She remained in the hospital until June 11th. The cyst was constantly washed out and the cavity contracted slowly. When she left the hospital the cavity was four inches deep and the tube

three inches long. She had gained much flesh and strength. During the summer I saw her every two or three weeks and gradually shortened the tube. The discharge was much diminished. She appeared one day and stated that she had just been married.

July 30th. The cavity was three and one-half inches deep and barely large enough to admit a one-fourth inch drainage-tube. It discharged freely. Two hard tender lumps could be felt, one on each side of the fundus uteri.

In the fall the condition was much the same. The lumps above noticed were found to contain pus and were opened into the cavity. I washed the cavity with every known disinfectant and astringent, iodine, Heaton's hernia mixture, and finally with spirits of turpentine. All to no purpose, the cavity would not close.

February, 1886. She re-entered the hospital. A counter opening was made from the vagina into the bottom of the cavity and a large tube put through from the abdomen to the vulva. This caused very free suppuration which gradually subsided under constant washing. The tube was gradually shortened and the abdominal wound allowed to close. After the tube had been pulled down out of the abdominal opening it was at first found impossible to prevent it from slipping out through the vagina. It was, however, finally held in place by a silver wire passed up through the abdominal wound where it was fastened to a piece of wood and could be gradually led down by unwinding the wire.

In June she left the hospital with only a very shallow opening in the vaginal wall, all the tubes having been removed.

July 19th. I saw her at my office and found that all the lumps and hardness had disappeared from the

abdomen. The openings had healed except that the old scar in the abdomen breaks down and discharges a little blood at each menstruation. She was perfectly well and keeping house.

CASE III.— CYST DISCHARGING PER VAGINAM, DRAINAGE THROUGH ABDOMEN AND VAGINA: RELIEVED.

Mrs. W. was advised by Dr. Bush to apply to the Free Hospital. I first saw her at her home on April 23, 1885. She was an actress, aged twenty-eight. In September, eight months before I saw her, she had first noticed an enlargement of the abdomen. She then lived in a small Western town. Her doctor told her that she had a tumor. It grew larger very rapidly, and in November it was tapped, and thirty pounds of fluid drawn off. Six weeks later it was tapped again, and three gallons more fluid drawn off. At the same time, an attempt was made to open the tumor through the vagina, but no fluid was so discharged. After this operation she was sick in bed for three months. She was brought to Boston in March, since which time she had been very ill. Two weeks previous to my visit, the tumor broke and discharged through the vagina. Since then she had had a profuse greenish discharge. She suffered great pain, and had taken a grain and a half of morphia a day for several months. She had always been well before this illness, with the exception of two miscarriages eight years previous.

The patient was very small and thin, and in a deplorable general condition. She was feverish and discouraged. A large, tender, fluctuating tumor filled the whole abdomen, extending so high up that the ribs were lifted. The cyst was discharging pus through the vagina. The uterus was crowded up behind the pubes.

When she entered the hospital the pulse was 150, and very poor; the temperature was 103.5° F. There was occasional vomiting of food. At a consultation of the hospital staff, Dr. Baker, Dr. Davenport, and myself, it was decided that the tumor was a suppurating ovarian cyst, and that the patient was in a very critical condition, and would surely die unless something was done immediately.

On April 27th I operated, without much hope that she would recover. On opening the abdomen, I found the cyst universally adherent, and filled with stinking pus. This being evacuated, the hand was passed in, and a large mass of papillomatous growth scooped out. This caused much bleeding, and sponges were packed into the cyst. After the large cyst was emptied, a small tumor of the other ovary became apparent. An attempt was then being made to dissect out the sac of the cyst when the patient became collapsed, the pulse being almost imperceptible. A drainage-tube was then pushed through Douglas's fossa into the vagina, and the cyst wall was quickly stitched to the abdominal wall. One drainage-tube went through the cyst, and another was only in the abdominal opening. Dr. Green, Dr. Johnson, Dr. Clark, and the late Dr. Lombard assisted me.

The patient was put to bed with heaters. Stimulants were given by rectum and subcutaneously. She rallied in a few hours, and although the pulse was very weak for a few days, she was soon in much better condition than before the operation. The temperature fell to 99°, and stayed there for a time. The vomiting ceased, and the appetite improved. The cyst was washed out several times a day with an antiseptic solution. The discharge was profuse at first, but gradually diminished. She had an attack of bronchitis, and during a paroxysm of coughing, the vaginal tube,

which had been cut from the abdominal tube, was forced out.

All went well then until the fourteenth day, when the temperature and pulse began to rise again; temperature 103.4° F., pulse 150. There was also great pain in the side.

May 15th. The patient was etherized, and on exploring the region where the pain was referred, it was discovered that one of the cyst-cavities had closed and formed an abscess. This was opened and drained.

Things looked better after this. She began to improve again, but on May 30th the pulse and temperature began to go up again, and it was impossible to keep the discharges from smelling.

June 2d. Under ether, an examination was made, and an abscess broken open inside the cyst. In searching for more pus-cavities, the cyst wall was accidentally opened, and the finger went into the peritoneal cavity. Fresh drainage-tubes were put into all the cavities, and one was passed again through Douglas's fossa into the vagina. After this operation there was severe pain, requiring much morphia. The pulse continued rapid, and the patient was still in a critical condition.

June 4th. It was evident that an abscess was forming in the peritoneal cavity, around the hole made in the cyst wall at the last operation. There was great pain, some vomiting; almost all food was refused. Pulse 130, temperature 102.° The patient was very low.

June 15th. I etherized her again for the third time since the operation. The intra-peritoneal abscess was opened, and a large quantity of stinking pus evacuated. I then began a systematic search in all directions to find retained pus, and, to my dismay, I found a sponge at the bottom of one of the cavities. This sponge had

been crowded in to stop the bleeding from the papillomatous growth, when the patient collapsed at the first operation, and had long since been forgotten. Everything was thoroughly disinfected, and all the tubes replaced. After a time some of the cavities closed, and the cyst was more easily drained. The large cyst-cavity gradually contracted. Finally, we made a desperate effort to break off the morphia, but failed, and I am sure that the patient would have died if we had continued to withhold it. She gradually gained strength until the end of June, when she was moved from the hospital. At home she continued to improve. All the tubes were removed, except the long one, which ran through the cyst.

July 28th. She was so much improved that she was up and about the room; was taking only one-quarter of a grain of morphia a day. The vaginal part of the tube was soon removed, and only a short tube remained in the abdominal opening. She went into the country for the summer, where she improved so much that when she walked into my office in October I did not recognize her. She had gained much flesh and strength. Since then she has been able to go about and enjoy life.

I saw her on October 21, 1886, when she told me that she had removed the tube a year ago, and that since that time the sinus would remain healed for several months at a time, but would suddenly break open and discharge pus for a few days, and then heal again. I found that the old tumor had disappeared, but that the small one on the other side had grown to the size of a cocoanut; I advised its removal.

It should be understood that the deplorable condition in which I first found the patient was due to the tapping which had been done several months previous. In spite of the outcry against tapping, we continue to meet patients suffering from that maltreatment.

Although we know from experience in ovariotomy that patients may tolerate an extraordinary amount of damage in the way of tearing out an adherent cyst wall, we also know that patients not infrequently die on the table, or soon after these most severe operations. Drainage offers a chance for some of the bad cases. I have taken pains to follow out these cases, in order to get a clear idea of the course and results of drainage. With this side of the picture complete, we shall be better prepared to decide in a given case whether to risk a very serious operation, or to go through with the tediousness of drainage. Schroeder and others have objected to drainage, on account of the tendency to recurrence. Rheinstaedter [2] reports seven cases where more or less of the cyst was left and drained; all seven recovered without recurrence. Certainly, there has been no special tendency to recurrence in my cases, and one was papillomatous, operated on one and a half years ago. If any of them recur in the future, I have, at least, the satisfaction of giving them a year or two of comfortable life. It may also be possible to do another operation, under conditions more favorable than the first.

These cases have raised the question of how ovarian cysts discharging into the various cavities are best treated. If the cyst is discharging into the rectum or vagina, an attempt should be made to drain in that direction, as in cases I and III. If the cyst is discharging into the intestine or bladder, it should be removed by laparotomy, and the opening into intestine or bladder closed by suture.

[2] Zeitschrift f. Geburt. v. Gynæcol., B. X., 1884.